A Correlational Study between Perceived Social Support and Fear of Childbirth Experiences among Primigravida Women in a Selected Tertiary Care Hospital, Kolkata, West Bengal

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Abstract: *This descriptive study aimed to assess the prevalence of perceived social support and fear of childbirth among primigravida women and to investigate the correlation between these two variables. The mean value of perceived social support was 56.12 (SD = 11.093), and the mean value of fear of childbirth was 39.41 (SD = 5.400). The median values were 56 for perceived social support and 40 for fear of childbirth. The correlation coefficient between perceived social support and fear of childbirth was –0.216, indicating a negative relationship between the two variables. This suggests that higher levels of perceived social support are associated with lower levels of fear of childbirth. This finding suggests that higher levels of perceived social support are associated with lower levels of fear of childbirth. The relationship was statistically significant, as the calculated 't'-value (3.119) exceeded the critical value (1.96) at the 0.05 level of significance, with 198 degrees of freedom. Additionally, the p-value was less than 0.05, further confirming the statistical significance of the correlation.*

Keywords: Perceived social support, fear, childbirth, Primigravid women, Tertiary care Hospital

1. Introduction

Every woman's pregnancy and childbirth is a unique and personal experience, and it is an exciting time for many parents. Still, it can also be a period of uncertainty and anxiety, and from the physical changes to the emotional rollercoaster of hormones, pregnancy can bring up many unexpected challenges [1].

A quantitative survey research design was conducted by Ujwala R. Mane, Jyoti A. Salunkhe, and Satish Kakade in 2024, focusing on the Rethare, Vadgaon, Kale, and Supane areas of Karad Taluka. In the first trimester, 103 women (29.9%) reported receiving strong family support, 175 (50.9%) reported moderate support, and 66 (19.2%) reported poor support. This family support encompassed physical, emotional, and psychosocial aspects[2].

Otherwise, Fear of childbirth (FOC) is a feeling of uncertainty and anxiety before, during, or after delivery, which may increase the risk of various physical problems and mental disorders, thereby affecting maternal and infant morbidity and mortality. The prevalence of FOC as reported in some countries was 4.5% in Belgium, 3.7% in Finland, 24% in Australia, 27% in the United States, China (56.64%)20 and Iran (89%)[3].

2. Background of the Study

Family support significantly influences lifestyle habits and health behaviors, affecting pregnancy outcomes. In India, the joint family system remains common, and despite urbanization and modernisation, families continue to play a central role. Quality care during pregnancy is vital for the health of both mother and baby. Hormonal changes during pregnancy can contribute to anxiety and fear about childbirth. As per NFHS data, caesarean rates in India rose from 17.2% in 2015–16 (NFHS-4) to 21.5% in 2019–21 (NFHS-5). Fear of childbirth is a key reason many women prefer caesarean delivery. Women reported the highest need for informational (90.33%) and emotional support (88.78%), while the lowest was for physical support (80.19%)[4].

According to Dr. P. Shah (FOGSI), caesarean deliveries have increased by 25% in teaching hospitals and over 50% in private hospitals over two decades, largely among first-time mothers (TOI, 2023)[5].

A 2018 systematic review reported global fear of childbirth (FoC) rates ranging from 6.3% to 14.8% in countries like Europe, Australia, Canada, and the U.S. An earlier review across 18 countries found FoC prevalence between 3.7% and 43%[6].

A study conducted in Thailand reported that 16.1% of pregnant women experienced a moderate level of fear of childbirth (FoC), a prevalence comparable to that found in many Western studies. However, the prevalence of severe FoC was significantly lower at just 0.7%, in contrast to higher rates reported in Western populations. Similarly, Zhou et al. found that 21% of Chinese multiparous women experienced moderate to severe FoC. In comparison, a recent Canadian study reported that 7.1% of pregnant women experienced FoC[7].

Need for the Study
Social support helps pregnant women cope with stress by providing essential resources and promoting social engagement. This, in turn, can prevent adverse birth outcomes and contribute to improved self-confidence, stronger immunity, and healthier behaviors[8].

Approximately 6–10% of women experience intense fear of childbirth, which can disrupt labor, negatively affect pregnancy outcomes, hinder mother–child bonding, and increase the risk of postpartum depression. The lack of specific data from the Kashmir region highlights the need for targeted research, which would also contribute to the broader body of knowledge on this issue[9].

Aims and Objectives of the study
To assess the prevalence of perceived social support and fear of childbirth in primigravida women to find out the correlation between perceived social support and fear of childbirth in primigravida women.

3. Materials and Methods

For this study, a quantitative approach with a non-experimental descriptive correlational design was used. The final sample included 200 primigravida women, with a pilot study conducted on 20 primigravida women from the Antenatal outdoor clinic at R. G. Kar Medical College and Hospital, Kolkata, West Bengal. A structured interview schedule was used to collect background information, including education, family income, trimester, medical disorders, gravida, willingness, and body weight by gestational age. Tool II measured perceived social support, and Tool III assessed fear of childbirth using self-developed questionnaires. For data collection, inclusion criteria were primigravida women aged 18–32 attending the antenatal clinic for routine check-ups during the study period and willing to participate. The transactional model of perceived social support and fear of childbirth was used as the conceptual model.

Pilot study
After validation and necessary revisions, a pilot study was conducted from 21st to 23rd April with 20 primigravida women to assess the clarity of the Bengali and Hindi versions of the tools. Based on expert feedback, items 13 and 14 in the demographic section were revised. No changes were needed for the perceived social support and fear of childbirth items. Average completion time was 25–30 minutes. After incorporating suggested changes, the tool was tested for reliability using the test-retest method with 20 primigravida women from the same antenatal OPD. A reliability coefficient of 0.85 indicated high reliability.

4. Results

Among the 200 primigravida women studied, 63% were aged 18–22, 56% lived in urban areas, 43% had secondary education, and 88% were housewives. Most were Muslim (51.5%), from nuclear families (53%), and lived in their own houses (70%). About 77% had a monthly income up to ₹20,000, and 70.5% had intended pregnancies. The majority were in their third trimester (57%), had no infertility history (90.5%), and 51.5% had a support person. Additionally, 73.5% reported no comorbidities, 81% had no unpleasant events, 89.5% felt the first fetal movement at 20 weeks, and 71% had appropriate weight gain. In terms of social support, 15.5% had poor, 66.5% moderate, and 18% good support. The mean perceived social support score among primigravida women was 56.12, with a median of 56 and a standard deviation of 11.092. The skewness value of 0.162 indicates an approximately normal distribution with a slight positive skew. Out of 200 participants, 27 (13.5%) reported low fear of childbirth, 148 (74%) reported moderate fear, and 25 (12.5%) reported high fear of childbirth. The mean fear of childbirth score among primigravida women was 39.41, with a median of 40 and a standard deviation of 5.40. The skewness value of –0.325 indicates an approximately normal distribution with a slight negative skew.

The correlation coefficient between social support and fear of childbirth was –0.216, indicating a significant negative relationship. This was supported by a t-value of 3.119, which exceeded the critical value of 1.96 at the 0.05 significance level with 198 degrees of freedom, and a p-value < 0.05, confirming statistical significance.
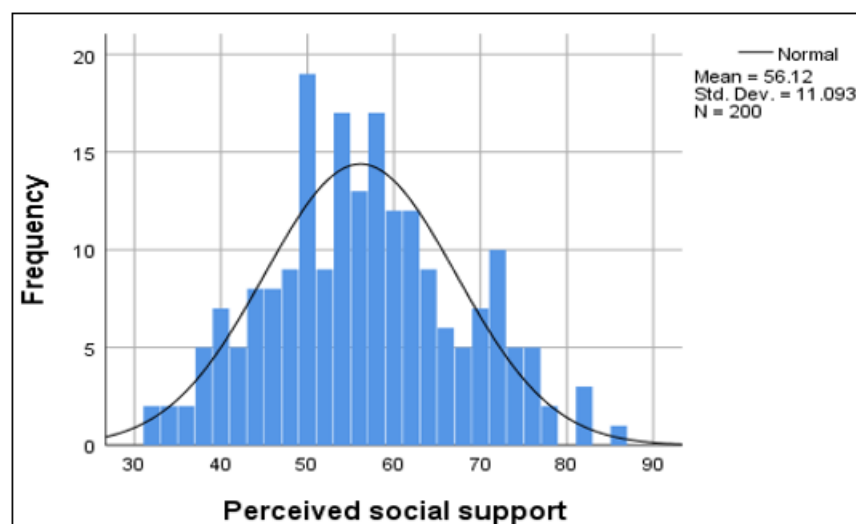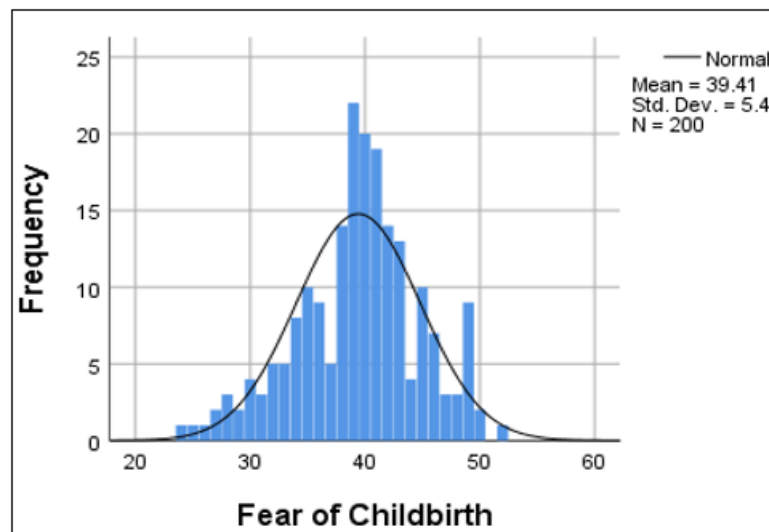

Figure 2: Normal curve of perceived social support among primigravida women

Normal curve of fear of childbirth among primigravida women

5. Conclusion

Although the correlation is modest (r = –0.216), it remains meaningful, underscoring the importance of social support in shaping the childbirth experiences of first-time mothers. Perceived social support—especially from significant others such as partners, family members, and close friends—plays a crucial role in influencing a woman's emotional and psychological responses to pregnancy and childbirth. Implementing Training for family members and caregivers can enhance their ability to offer practical, emotional, and psychological support, potentially improving maternal well-being and reducing childbirth anxiety.

Conflict of Interest
The authors declared no conflicts of interest or relevant financial relationships.

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